Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A power device, comprising:

a semiconductor substrate of first conductivity having an upper surface and a lower surface;

a first electrode terminal coupled to a first conductive region provided proximate the upper surface of the substrate, the first electrode terminal being provided over the upper surface of the substrate;

a second electrode terminal coupled to a second conductive region provided proximate the lower surface of the substrate, the second electrode terminal being provided below the lower surface of the substrate;

an isolation diffusion region of second conductivity provided at a periphery of the substrate and extending from the upper surface to the lower surface of the substrate, the isolation diffusion region having a first surface corresponding to the upper surface of the substrate and a second surface corresponding to the lower surface;

a peripheral junction region of second conductivity formed at least partly within the isolation diffusion region and formed proximate the first surface of the isolation diffusion region; and

a passivation layer provided over the upper surface of the substrate, the first surface of the isolation diffusion region, and the peripheral junction region, the passivation layer comprising a polyimid layer over and oxide layer;

wherein the peripheral junction region is different than the first and second conductive regions, and

wherein the first and second electrode terminals define a vertical electrical current path therebetween.

2. (Original) The device of claim 1, wherein the peripheral junction region is a P+ region and the isolation diffusion region is a P region.

3. (Previously presented) The device of claim 1, wherein the peripheral junction region is provided to compensate the surface depletion of dopants in the isolation diffusion region.

4-25. (Canceled)

26. (Previously presented) The device of claim 1, wherein the passivation layer includes an oxide layer and contacts the upper surface of the substrate, the first surface of the isolation diffusion region, and the peripheral junction region.

27. (Canceled)

28. (Previously presented) The device of claim 1, wherein the peripheral junction region is provided to compensate the surface depletion of dopants in the isolation diffusion region and increase a reverse blocking voltage of the device by reducing an electric field at the first surface of the isolation diffusion region.

29. (Canceled)

30. (Previously presented) The device of claim 1, wherein the device is a diode and the first electrode terminal being separated from the isolation diffusion region.